

*Remarks*

Reconsideration of remaining claims 1-6 and 8-30 is respectfully requested.

In the Office action dated November 5, 2003 (application Paper No. 6), the Examiner objected to the Oath/Declaration and rejected the claims under 35 USC §§ 102(e) and 103(a). The Examiner's objections and rejections will be discussed below in the order appearing in the Office action.

*Objection to the Oath*

The Examiner first objected to the oath in that "no claims to priority have been made" to various applications cited in the specification. A re-executed oath is being obtained and will be forwarded to the Examiner upon its receipt, applicants' attorney is still attempting to locate two of the co-inventors.

*Drawings*

The drawings submitted in response to the previous Office action (submitted 8/5/03) have been approved by the Examiner.

*35 USC § 102(e) Rejection - Claims 1, 3-7 and 13-30*

The above-cited claims were again rejected by the Examiner under 35 USC 102(e) as being anticipated by US Patent 6,385,773 (Schwartzman). In particular, the Examiner cited Schwartzman as teaching "a system and method for switching frequencies in the presence of ingress noise", where Schwartzman at column 9, lines 59-

62 is cited as teaching “marking the frequency band and time interval ‘in which the ingress events exceeds a predetermined threshold’” and the “claimed creation of a time/frequency map of the ingress events containing results of times and frequencies above a pre-determined threshold” is cited by the Examiner as taught at column 12, beginning at line 41 of Schwartzman.

In response, applicants have amended independent claim 1 to include the limitation of claim 7 directed to “summing the results of the marking process across a plurality of frequency bands”. The Examiner has cited Schwartzman at column 10, lines 32-52 as disclosing this aspect of the present invention. Applicants do not agree with the Examiner’s conclusion, based on the difference in usage of the phrases “frequency bands” and “frequency channels”, as applied in the rejected claims and the Schwartzman reference, respectively. In particular, and with reference to the portion of Schwartzman cited by the Examiner, *a single frequency channel* is split into a plurality of “subbands”, and then the power may be measured across these subbands and “correlated” to analyze the results. Each frequency channel in Schwartzman is analyzed independently. See, for example, column 10, beginning at line 46, which states “the spectrum analyzer looks at the power level of a frequency channel at a particular instance of time....The correlated data is used as a useful indication of the power on a particular channel”.

The term “frequency channel” in Schwartzman can be equated with the term “frequency band” in the arrangement of the present invention, where in association with the FIGs. 5 and 6, a plurality of separate “frequency bands” are illustrated. The present invention functions to measure the characteristics of the complete return path, over the plurality of bands, as a function of both frequency and time. In contrast, there is no discussion or disclosure in Schwartzman of comparing one channel to another, where it is known that the return path of Schwartzman comprises a plurality of return channels. Each channel is analyzed separately, with each channel broken down into a plurality of subbands.

Since each frequency channel of Schwartzman is reviewed separately, there is no disclosed method of ascertaining the presence of wideband noise in Schwartzman. Further, there is no teaching in Schwartzman of “(e) summing the results of the marking process of step (c) across a plurality of frequency bands within a specific time interval”,

as defined by amended claim 1. Using the language of Schwartzman, this would require summing “across a plurality of frequency channels”. Such is not disclosed in Schwartzman.

Without this teaching, applicants assert that Schwartzman cannot be found to disclose or suggest the arrangement of the present invention which requires “marking” both a frequency band *and* a time interval associated with each ingress event and then generating a time/frequency map to evaluate the presence of these events. Applicants therefore respectfully request the Examiner to reconsider this rejection and find claims 1, 3-6 and 13-30 to be in condition for allowance (claim 7 having been cancelled).

*35 USC § 103(a) Rejection - Claims 2 and 8-12*

Claims 2 and 8-12 were next rejected by the Examiner under 35 USC 103(a) as being unpatentable over Schwartzman (as above). Without the teaching of providing both time-based and frequency-based ingress noise information, including the summation of the marking process “across a plurality of frequency bands”, applicants assert that Schwartzman cannot be found to render obvious the subject matter of the present invention as defined by rejected claims 2 and 8-12.

Applicants therefore respectfully request the Examiner to reconsider this rejection and find claims 2 and 8-12 to be in condition for allowance.

*Summary*

The present application contains claims 1-6 and 8-30, where the subject matter of claim 7 has been incorporated into independent claim 1, and various other claims have been amended in light of this change to claim 1. Applicants believe that the case, in its present form, is now in condition for allowance and respectfully request an early and favorable response from the Examiner in that regard. If for some reason or other the

Examiner does not agree that the case is ready to issue and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicants' attorney at the telephone number listed below.

Respectfully submitted,

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Date: 1/5/04